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PATENT  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of: ) System and Method of Introducing Ozone Treated  
J. Michael Corrigan et al. ) Humidified Air Into A Refrigerated Service Display  
Serial No.: 10/725,097 ) Case or Refrigerated Storage Room  
Filed: December 1, 2003 )  
 ) Group Art Unit: 1761  
 )  
 ) Examiner: Alexander, Reginald

**REPLY BRIEF**

Mail Stop Appeal Briefs - Patent  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

This brief is in reply to the Examiner's Answer mailed April 15, 2008.

In this brief, applicants will not repeat the arguments made in the main Brief on Appeal. Rather, this reply will respond as appropriate to the response to argument in Section 10 of the Examiner's Answer.

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37 CFR 1.8  
**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Briefs - Patent, Commissioner for Patents, P.O. Box 1459, Alexandria, Virginia 22313-1450, on June 16, 2008.

Signature: Corinne Byk  
Corinne Byk

**GROUND 1**

Applicants' argument is summarized with the statement that neither Kleinberger or Denvir discloses or suggests using an atomizing nozzle delivering ozonated vapor in a humidification system.

Applicant, in its argument, noted that Kleinberger does not disclose an air atomizing nozzle. The Examiner's answer responds that claim 1 does not require an air atomizing nozzle. In fact, claim 1 specifies an atomizing nozzle. The reference to Kleinberger not disclosing an air atomizing nozzle recognizes that Kleinberger mixes air with water in its nozzle, but the nozzle is not an air atomizing nozzle. It is not an atomizing nozzle. More particularly, it is not an ozone atomizing nozzle which delivers ozonated vapor. Even if Kleinberger mixed ozone with water, the result would not be ozonated vapor since Kleinberger does not use an atomizing nozzle.

The answer goes on to state that air in Kleinberger is pressurized at some point. There is no disclosure for the same. The fact that air is drawn and mixed with pressurized water is not the same as pressurizing air for delivery to a nozzle. Thus, the Examiner's answer relies on an inaccurate interpretation of the teachings of Kleinberger.

Likewise, the Examiner's interpretation of Denvir as disclosing an air compressor in the form of a pump is inaccurate. The fact that a Webster's Dictionary defines a compressor as a form of a pump does not support the opposite conclusion that a pump is a compressor.

For the above reasons, claims 1, 5, 9 and 10-13 are not obvious.

**GROUND 2**

Applicant stands by the arguments presented in the main brief supplemented with the arguments noted above relative to Ground 1.

**GROUND 3**

In its main brief, applicant argued that Denvir teaches away from the combination by stating that ozone decomposition is accelerated by water and at high pressures. The Examiner's answer responds that:

Applicant goes on to state that Denvir (col. 3, lines 45-58) teaches that ozone decomposition is accelerated by water and at higher pressures. A review of Denvir et al. at the recited location indicates that Denvir is aware that ozone is not suited for storage of long periods of time. This is opposite of what Dettling would be teaching in a food display case, which would be storage for short periods of time.

This discussion in the action oversimplifies what is actually stated in Denvir. Particularly, Denvir states that ozone decomposes at higher pressures. The fact that ozone is not suitable for storage for more than a short period of time is due to numerous factors, only one of which relates to decomposition being accelerated at higher pressures. This passage recites that decomposition is accelerated. From this fact alone, one would tend to think that compression of ozone would not be desirable.

Moreover, Denvir states at col. 5, lines 12-24:

Thus, there is a need for ozone treatment systems, methods or devices that would partially or totally eliminate the need for storing ozone prior to its use in treating contaminated materials. It would also be desirable to provide improved systems of introducing and distributing ozone through the contaminated material so that the contaminated material is uniformly exposed to the ozone. **Furthermore, it would be desirable if the system prevented overheating and pressure buildup,** made optimum use of ozone, and reduced or eliminated ozone waste and transfer to the environment. More particularly, it would be desirable to have a system that would provide better ozone treatment of dry contaminated material (emphasis added).

Thus, Denvir in addition to teaching away from long term storage, independently states that it is desirable to prevent pressure buildup. Use of a compressor does not prevent pressure buildup. To the contrary, it specifically relies on pressure buildup. Moreover, the last statement of this passage suggests that Denvir is specifically dealing with ozone treatment of dry contaminated material. Thus, Denvir is specifically relying on treatment with ozone gas, not ozonated vapor.

Applicant otherwise repeats the arguments previously made in the main brief with respect to Ground 3. Claims 1, 5, 9, 11 and 12 are not obvious over Dettling in view of Denvir.

**GROUND 4 and 5**

Applicant stands on the arguments made in the main brief, supplemented with the comments herein relative to Ground 3.

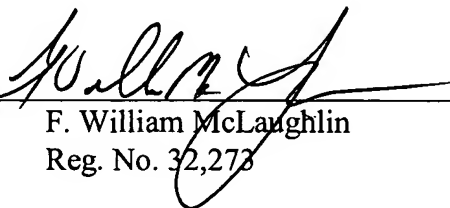
**SUMMARY**

The three principal references are Kleinberger, Denvir and Dettling. Kleinberger discloses a humidification system using a misting nozzle relying on pressurized water alone. It does not rely on use of pressurized air. There is no atomizing nozzle. Dettling uses an air atomizing nozzle, however, it does not disclose or suggest the use of ozone rather than air to the air inlet. Denvir discloses use of ozone gas for food decontamination. However, Denvir teaches against being combined with the other references noting that ozone decomposition is accelerated by water and pressure. The purpose of a compressor is to provide pressure build-up and in the context of the claimed invention is thereafter mixed with pressurized water in an air atomizing nozzle. Denvir teaches against such a system so that the combination is improper.

Reconsideration of the application and reversal of the rejections is requested.

Respectfully submitted,

Dated: June 16, 2008

By:   
F. William McLaughlin  
Reg. No. 32,273

Wood, Phillips, Katz, Clark & Mortimer  
Citigroup Center, Suite 3800  
500 West Madison Street  
Chicago, IL 60661  
(312) 876-1800